

UNITED STATE DISTRICT COURT
MIDDLE DISTRICT OF NORTH CAROLINA
No, 1:24-cv-563-WO-JEP

SHAYNE GUILIANO and
108LABS, LLC,
PLAINTIFFS,
v.
LEILA STRICKLAND and
BIOMILQ, INC.,
DEFENDANTS.

FIRST AMENDED COMPLAINT
(Jury Trial Demanded)

Shayne Guiliano and 108Labs, LLC for their first amended complaint against Leila Strickland and BIOMILQ, Inc. allege as follows:

Introduction

1. Human breast milk. The *New Yorker* called the ability to make it in a laboratory “alchemy.”¹ That is because breast milk is “the widely acknowledged gold standard in infant nutrition.”² Guiliano and Strickland developed a pioneering technique that allows milk (in particular human milk) to be artificially produced in a lab outside of the mother using cultured mammary cells. The technology could replace existing

¹ Molly Fischer, *BIOMILQ and the New Science of Artificial Breast Milk*, NEW YORKER, March 6, 2023, <https://www.newyorker.com/magazine/2023/03/13/biomilq-artificial-breast-milk#:~:text=Biomilq%20has%20demonstrated%20that%20its,necessary%20to%20approximate%20breast%20milk.>

² *Id.*

infant formula, as well as have a range of therapeutic uses. The potential market is vast.

2. This case is about a world-altering technology, the fallout between formerly married business partners who stand to profit greatly from this technology, and the outsiders who helped engineer the misappropriation of that technology. Two companies are at issue in this case: (i) 108 Labs, LLC, a limited liability company formed by joint inventors Guiliano and Strickland to develop the world's first cell-cultured milk and (ii) Biomilq, Inc. ("BIOMILQ"), a second company that Guiliano and Strickland formed to commercialize on that development.

3. Not surprisingly, this groundbreaking product attracted millions of dollars in investment from venture capitalists eager to benefit from the ability to market synthetic human breast milk. It also created what one investor called "the husband problem."

4. While 108Labs belonged solely to Guiliano and Strickland, they had a third partner in BIOMILQ—Michelle Egger. Strickland abruptly left 108Labs to join Egger at BIOMILQ and at the same time maritally separated from Guiliano. This happened soon after experiments demonstrated reduction to practice of 108Labs' invention. "Reduction to practice" means that Guiliano and Strickland's synthetic breast milk was more than a brilliant idea—it was real and, therefore, could be commercialized.

5. Strickland improperly divulged all aspects of 108Labs' intellectual property and trade secrets to BIOMILQ. BIOMILQ then improperly used 108Labs' proprietary technology to raise funds, seek patents and pursue the production of cell-cultured milk. But for its misappropriation of 108Labs' proprietary technology, BIOMILQ would never have existed as a viable company.

6. Guiliano and 108Labs were squeezed out entirely. This is an action to correct that.

7. This is an action to correct inventorship under 35 U.S.C. § 256 with respect to two patents related to cultured mammary cells: U.S. Patent Application No. 11,111,477 ("the '477 patent") and U.S. Patent Application No. 11,206,843 ("the '843 patent"), (collectively, "the Patents"). Copies of the Patents are attached as Exhibits A and B, respectively.

8. The Patents incorporate texts and figures from a patent application filed by 108Labs' patent counsel for inventors Guiliano and Strickland when they were both part of 108Labs. U.S. Provisional Patent Application No. 62/958,407 ("the '407 application") identifies Guiliano and Strickland as joint inventors. A copy of the '407 application is attached as Exhibit C.

9. Strickland breached her fiduciary duty to Guiliano and 108Labs, which constitutes constructive fraud under North

Carolina law. As a result of that constructive fraud, Guiliano and 108Labs seek a constructive trust over the Patents to prevent BIOMILQ from continuing to profit at Guiliano's and 108Labs' expense.

10. This is also an action for misappropriation of trade secrets under the North Carolina Trade Secrets Protection Act, N.C. Gen. Stat. §§ 66-152, *et seq.*, conversion under North Carolina law, and for violations of North Carolina's Unfair and Deceptive Trade Practices Act, Chapter 75 of the N.C. General Statutes.

11. Guiliano also seeks a declaratory judgment that, pursuant to an agreement he had with BIOMILQ, he is a 5% owner of that company.

Parties

12. Guiliano is an organic chemist, software developer and entrepreneur residing in Hillsborough, North Carolina.

13. Guiliano is a co-founder and current sole manager of 108Labs. Guiliano is a joint inventor of the technology disclosed in the '407 application and should properly be listed as a joint inventor of the '477 patent and the '843 patent.

14. Guiliano was married to Strickland from July 2008 to December 2023; Guiliano and Strickland separated March 29, 2020.

15. 108Labs is a North Carolina limited liability company, with its principal place of business in Orange County, North Carolina.

16. Strickland is a co-founder and former member-manager of 108Labs, and a joint inventor of the technology disclosed in the '407 application, Patent 477 and Patent '843. Strickland resigned from 108Labs March 29, 2020.

17. In December of 2020, Giuliano, Strickland and Egger founded BIOMILQ. They formed BIOMILQ to commercialize cell-cultured milk using 108Labs' proprietary technology.

18. The intent was that BIOMILQ would license the technology from 108Labs.

19. Upon information and belief, Strickland was the majority owner of BIOMILQ when BIOMILQ filed the '477 patent and the '843 patent.

20. BIOMILQ is a privately held Delaware corporation, with its principal place of business in Durham, North Carolina.

Jurisdiction and Venue

21. This Court has jurisdiction over this matter under 28 U.S.C. §§ 1331 and 1338 and 35 U.S.C. § 256.

22. Venue is proper in this judicial district under 28 U.S.C. § 1391(b)(1)(2).

23. This Court has personal jurisdiction over the Defendants because BIOMILQ, of which Strickland is an executive,

operates within this District and the actions taken by Strickland and BIOMILQ that harmed Guiliano and 108Labs occurred within this District.

Facts

The Guiliano-Strickland Collaboration and Formation of 108Labs

24. Guiliano and Strickland, both scientists, met in 2003 and married in 2008. Strickland became a cell biologist while working in labs at Boston College and Stanford, and Guiliano became an organic chemist while working in labs at Boston College.

25. By 2010, both Guiliano and Strickland had left behind careers in scientific lab research to raise their children and pursue other professional and creative interests.

26. After leaving organic chemistry lab work, Guiliano pursued his interest in inventing novel software and biomedical technologies across a range of scientific and technical fields. Guiliano is named as a joint inventor on U.S. Patent 10,347,382 relating to an antimicrobial resistance monitoring software platform.

27. In 2013, Guiliano and Strickland, who enjoyed reviewing and discussing scientific research together, reviewed an article about growing bacon from stem cells. This article prompted discussions between them on creating food from cell cultures. Guiliano suggested he and Strickland start their own

biotechnology company, which would let them resume their scientific research careers.

28. On or about September 11, 2013, while talking about how to get bovine cells for their meat and leather projects from the kill floor of a local area slaughterhouse, Guiliano first conceived of making milk with mammalian mammary cells.

29. The very next day, Guiliano and Strickland abandoned their efforts to create cell-cultured meat and leather and began a nearly seven-year collaborative effort to create the world's first cell-cultured milk.

30. Guiliano and Strickland officially founded 108Labs in the summer of 2013 to collaborate scientifically for the purpose of inventing novel cellular agriculture biotechnologies. They formally filed articles of organization on October 1, 2013.

31. 108Labs operated as a member-managed LLC. While the Articles of Incorporation named Guiliano as Organizer and Strickland as Member, Guiliano's role as a Managing Member was reflected in subsequent annual reports filed by 108Labs with the North Carolina Secretary of State.

32. Reflecting upon his and Strickland's growing family and the new possibilities related to the bovine milk project, Guiliano suggested to Strickland how amazing it would be to recreate breast milk to feed babies.

33. Strickland responded that it would be impossible to recreate breast milk because of the immunoglobulins in breast milk, which are not created by mammary cells.

34. "Immunoglobulins" are produced when plasma cells are co-cultured with mammary epithelial cells. One such immunoglobulin is secretory IgA. IgA is produced by plasma cells located within the breast tissue. sIgA transferred to children via breast milk is an integral component of an infant's immune system enabling them to fight off infections. Further, sIgA is an important component of the immune systems of all humans and sIgA deficiencies are associated with increased susceptibility to illness. sIgA-based therapies offer the opportunity to prevent and treat infectious diseases at their sites of entry.

35. Pondering ways to address the challenge of producing a full complement of protective molecules in breast milk inspired Guiliano to conceive of co-culturing "B cells" with mammary cells in a bioreactor. B cells are a type of white blood cell that makes infection-fighting proteins that are antibodies.

36. Strickland contemporaneously memorialized Guiliano's idea in a notebook—a practice Strickland continued throughout her time working with 108Labs.

37. On October 8, 2013, 108Labs executed its first laboratory lease in Research Triangle Park to research and develop cell-cultured milk and immunoglobulins from mammary

cells and B cells. Also, during this time period 108Labs opened bank accounts in its name and, with investments from family funds, purchased basic cell culture equipment and materials for its laboratory.

38. Even after founding 108Labs, Guiliano and Strickland continued to be employed by other companies. To stay connected about the work they each were doing on behalf of 108Labs, Guiliano and Strickland texted frequently throughout the day, engaged in regular Google chats, and had daily conversations each night at home to digest the progress of their research for 108Labs.

39. In early 2014, Guiliano coined the term "Cellufacturing" to describe the type of biomanufacturing 108Labs was conducting— the manufacturing of raw materials using biological organisms in the manufacturing process.

40. On March 2, 2014, 108Labs filed an application for the word mark "Cellufacturing" with the United States Patent and Trademark Office, which granted registration on the principal register as a federal standard character mark, Registration No. 4713875, with a registration date of March 31, 2015, for use in connection with "Biomanufacturing for others, namely, manufacturing of raw materials using biological organisms in the manufacturing process... ."

41. Guiliano and Strickland needed additional funding to support 108Labs. In March 2014, 108Labs submitted an "NCIdea" grant application. This grant application, prepared by both Guiliano and Strickland, described 108Labs' vision for the future of cell-cultured milk.

42. On or about September 30, 2014, 108Labs began induction of lactation in a polarized monolayer of mammary cells for the first time, using a 2D cell culture setup in a transwell plate.

43. In 2016, 108Labs entered into a new lease for lab space and launched a social media presence with a Facebook business page. 108Labs continued to pursue funding from outside investors.

44. On April 17, 2016, Guiliano and Strickland first began to apply 3D tissue culture concepts to 108Labs' bioreactor protocols. The 3D tissue culture is essential to the invention because it is the only way to achieve the density of cells necessary to achieve full lactation. Guiliano was convinced that growing 3D monolayers on hollow fibers would be the ideal geometric design for producing milk; a concept that would later be proven true in laboratory experiments.

45. 108Labs did not receive funding from grants or outside sources in 2016, and in 2017-2018, 108Labs did not engage in formal scientific operations. Guiliano and Strickland continued

to review cell cultured breast milk research and network locally on behalf of 108Labs.

Momentum Builds for 108Labs in 2019

46. In 2019, while 108Labs was moving forward with securing new lab space, identifying and contracting with companies to assist with running proof of concept experiments, and applying for government funding, it recognized the importance of finding individuals or entities with which to team up and/or investors who could help fund 108Labs.

47. At this time, the success of the Impossible Burger created by Impossible Foods had changed the market for novel cell-based projects and precision fermentation, with capital starting to flow into new ideas. Strickland and Guiliano recognized that the time was ripe to ramp back up development of cell-cultured milk and seek funding.

48. In April 2019, Strickland and Guiliano thought they had found the right people to team with 108Labs, Ali Rosenberg and Sarah Seay. They also thought they had a good lead on an investor for 108Labs' research.

49. From April to August 2019, detailed plans were made for 108Labs, together with Rosenberg and Seay, to create a separate company to focus upon cell-cultured milk.

50. During this time period, Guiliano and Strickland continued to research cell-cultured milk. On August 2, 2019,

Strickland and Guiliano discussed prolactin costs in a series of texts. Prolactin is a protein that is lactogenic. As used in the Patents the term "lactogenic" refers to the ability to stimulate production and/or secretion of milk. In this text exchange, Guiliano suggested that prolactin seemed like an ideal target for changing the genetics to remove dependency; Strickland agreed.

51. In September 2019, the relationship with Rosenberg and Seay soured when they demanded 108Labs transfer all rights and interests in its intellectual property to the new company. Guiliano and Strickland initially had disagreements about how to respond to these demands. Ultimately, 108Labs refused to assign its intellectual property to the new company and the business relationship with Rosenberg and Seay ended.

52. Rosenberg and Seay later claimed they owned a controlling share of a new entity purportedly created in August 2019 and that the new entity owned any and all intellectual property either Strickland and/or 108Labs had at that point. To dispute these claims, Guiliano and Strickland together compiled evidentiary proof of their collaboration and joint inventorship of 108Labs' intellectual property.

53. Rosenberg's and Seay's challenge to 108Labs' ownership of its intellectual property made Guiliano and Strickland realize they needed to be mindful of protecting 108Labs'

intellectual property when engaging with potential partners and investors.

54. Guiliano and Strickland also then hired legal counsel to advise them on ways to protect 108Labs' intellectual property and on the best practices to engage with investors and/or business partners moving forward.

55. 108Labs continued to pursue its experiments, even though the deal with Rosenberg and Seay had fallen through and the funding from the possible investor had not materialized.

56. On or about September 19, 2019, 108Labs engaged patent counsel, as documented by an engagement letter signed by Strickland as CEO of 108Labs, to help identify patentable concepts and the filing of patent applications for the technology 108Labs was producing.

BIOMILQ Envisioned as a Licensee of 108Labs

57. Once it became clear they would not be able to team with Rosenberg and Seay, Guiliano and Strickland considered other people with whom to work. Strickland had met Michelle Egger, a food scientist who had worked for the Bill and Melinda Gates Foundation on their nutrition team, in June 2019 during a meeting with Rosenberg. Egger's work focused on infant nutrition, child malnutrition and breast milk substitutes. Strickland proposed to Guiliano that they consider working with Egger.

58. After discussing the idea, Strickland and Guiliano decided to pursue a business relationship with Egger, with the idea that Egger could assist 108Labs with project branding.

59. Guiliano met with Egger for the first time on or about October 9, 2019, when he, Strickland, Egger and one of Egger's colleagues, Rachel Lichte, gathered to discuss 108Labs' research. Before discussing any confidential information, Egger and Lichte both signed non-disclosure agreements for 108Labs. Then, they discussed 108Labs' mammary cell milk project and how they could potentially all work together. At this meeting, they also discussed Guiliano's business plan, which included his vision for a project to personalize cell-cultured human milk with the cells from a mother. The ideas presented in this business plan became the primary project for the company that became known as BIOMILQ.

60. On or about October 17, 2019, Guiliano conceived the human milk basement membrane formulation, which is another way of saying a protein matrix, or matrix material. During this time period, Guiliano and Strickland were debating which basement membrane protocol to use in their experiments. Strickland wanted to use laminins, but did not specify which laminin. Guiliano researched the issue, and based upon his research, hypothesized that laminin I and collagen IV created a special combination. Guiliano convinced Strickland that 108Labs should utilize

Guiliano's protocol in the experiments. Guiliano's collagen-laminin formulation turned out to be a critical step of the protocol to create cell-cultured milk.

61. On November 14, 2019, 108Labs entered into a General Contract for Services with FiberCell Systems to begin proof of concept experiments using FiberCell's hollow fiber bioreactors. Notably, the FiberCell contract included a provision for "Work Product Ownership," that stated "[a]ny copyrightable works, ideas, discoveries, inventions, patents, products, or other information (collectively the "Work Product") developed in whole or in part by [FiberCell] in connection with the Services will be the exclusive property of [108Labs.]"

62. After additional discussions with Egger, in the fall of 2019, Guiliano and Strickland, in their capacity as representatives for 108Labs, became excited to form a new, affiliate entity that would be responsible for the commercialization of personalized human milk for infants. They envisioned that the owners of this new affiliate entity would be Guiliano, Egger and Strickland as partners, with Strickland as the majority owner.

63. Throughout the remainder of 2019, Guiliano helped 108Labs develop an extensive and comprehensive business plan for 108Labs, the use of 108Labs' technology, and the prospective affiliate company.

64. On December 2, 2019, after several months of planning and preparation, 108Labs began its first 3D tissue culture experiment under contract with FiberCell Systems, using mammary cells in a hollow fiber bioreactor, the protocols it would describe in the '407 application, filed one month later while the experiment was still running.

65. Guiliano and Strickland outlined a detailed plan for 108Labs and the prospective affiliate company in a National Science Foundation Grant Application. In the Grant Application they submitted on December 13, 2019, Guiliano and Strickland describe how 108Labs expected its business plan to unfold. It states, "108Labs cofounder Leila Strickland has partnered with Michelle Egger ... to develop a [direct-to-consumer] business model for selling human milk as a nutritional option for infant feeding[.]" The NSF Grant Application established that "108Labs is developing a cell culture platform for the production of milk for nutritional purposes for mammalian cells." It further described details about a prospective affiliate and majority women-owned entity which was to be formed as a C-corp that would license from 108Labs the technology to make human milk. The NSF Grant Application expressly stated that "[t]he business established for this purpose by [Strickland] and [Egger] will obtain a license from 108Labs for human milk."

66. The team had been considering names for the prospective affiliate company and decided on BIOMILQ. On January 2, 2020, Strickland promoted the founding of the 108Labs' brand, BIOMILQ, on 108Labs' Facebook page.

67. During this time period, Guiliano, Strickland and Egger agreed to form a C-corp in the name of BIOMILQ, and on January 8, 2020, they incorporated BIOMILQ in the state of Delaware. Guiliano and Strickland used funds from their personal joint checking account to pay the fees for incorporation. The C-corp was not a functional entity at the time of incorporation; it had no shareholders, no documents related to its governance, and notably, no intellectual property apart from that which it intended to license from 108Labs.

68. At the time of incorporation, as had been set forth in the NSF Grant Application, Guiliano believed that BIOMILQ would be an affiliate of 108Labs and utilize 108Labs' technology pursuant to a licensing agreement.

69. On January 8, 2020, Guiliano and Strickland, both named as individual inventors, by and through their patent counsel, filed the provisional application for the patent that became the '407 application, entitled Live Cell Constructs for Milk Production and Methods Using the Same.

70. The next day, their patent attorney sent Guiliano and Strickland an Assignment Agreement to execute for the purpose of

formally documenting the transfer of all the inventors' rights, title and interest in the '407 application from both Guiliano and Strickland to 108Labs. This assignment was not executed.

71. On or about January 15, 2020, Guiliano convinced Strickland to run the 108Labs prolactin escalation protocol, utilizing 200 uL/mL rather than 100 uL/mL. This prolactin escalation successfully turned on lactation and turned out to be a critical step in the protocol for cell-cultured milk production.

72. On or about January 17, 2020, the experiment FiberCell conducted at the direction of 108Labs resulted in biosynthesis of the major components of human milk.

With Success Comes Conflict

73. In February 2020, Guiliano, Strickland and Egger had discussions regarding the details of the relationship between 108Labs and BIOMILQ, including equity interest percentages and options for licensing 108Labs' technology. The group agreed that Strickland would be the majority owner with a 53% interest; Egger would have a 42% interest; and Guiliano would have a 5% interest.

74. On February 6, 2020, without Guiliano's notice or approval, Egger released a blog post which appeared to give BIOMILQ, Strickland and Egger sole credit for the invention of cell-cultured human milk and analytical identification of

lactose and casein in 108Labs' samples. No credit was given to Guiliano or 108Labs, who were not mentioned at all in the blog post. Egger's blog post generated great interest in cell-cultured milk.

75. Notwithstanding Egger's inaccurate post, Guiliano continued to collaborate in good faith in 108Labs' research. On February 11, 2020, Strickland complimented Guiliano's work product on the cell culture media project which included scientific formulation, vendor and costs analysis per liter of milk produced, stating "This is EXCELLENTLY DONE. Thanks so much! I have a skeptical investor asking questions right now, and this analysis really gives me confidence in my responses."

76. By February 25, 2020, Egger began to pressure Guiliano to sign over all rights to the invention of cell-cultured milk to BIOMILQ, instead of BIOMILQ receiving only a field of use license. Guiliano never agreed, and he never executed any contract to transfer 108Labs' technology or property or assign any rights in the '407 application to BIOMILQ.

77. On March 9, 2020, 108Labs received word that the National Science Foundation had not approved its grant application. This meant it would need to continue to look elsewhere for funding its research.

78. Throughout March 2020, a growing conflict between Guiliano, Strickland and Egger arose with respect to the proper

way to allow BIOMILQ to use 108Labs' intellectual property. Egger thought it was critical for 108Labs to assign its entire interest in the '407 application to BIOMILQ; Strickland wanted to do whatever was necessary to receive funding from investors and was receptive to assignment; Guiliano opposed assignment but still thought a field of use license would be acceptable.

79. The monumental scientific achievement of the January 2020 reduction to practice of 108Labs' technology was confirmed and celebrated two months later by a leading human milk researcher at University of California, Davis Department of Food Science & Technology, Dr. Daniela Barile. Dr. Barile had developed advanced scientific techniques for rapid identification of the special proteins normally found only in human milk.

80. On March 17, 2020, after analyzing some of 108Labs' samples that 108Labs had contracted with her to evaluate, Dr. Barile wrote to Strickland and Guiliano, "Leilia, Shayne ... these results provide really strong evidence that you are making a product that [has] all the main human milk proteins I would say...these results call for a champagne celebration! Ready for the next press release? 🍷 "

81. The March 17 proteomics data made clear that 108Labs had created the world's first cell-cultured milk at a quantity that showed scalability of its technology. These results also

made clear that 108Labs' invention had substantial monetary value.

82. The proteomics data also indicated the experiment had produced immunoglobulins, which could have commercial potential in the therapeutic marketplace. Guiliano and Strickland had not expected that the experiment would produce the immunoglobulin data and Guiliano wanted to take time to understand the data and its implications.

83. While the market viability of 108Labs' inventions was becoming clear, mistrust and conflict between Guiliano and Egger escalated. In a Zoom video meeting on the morning of March 20, 2020, Guiliano demanded that Egger stop using 108Labs' scientific data in fundraising because BIOMILQ had no legal right to 108Labs' scientific data. In response to this demand, Egger informed Guiliano she would not cease using the data and she left the Zoom meeting.

84. The same day, Guiliano discussed his concerns about Egger's actions with Strickland and considered having a lawyer send Egger a "cease and desist" letter. Strickland pleaded with Guiliano not to take legal action against Egger and invited him to observe investor calls scheduled for later in the day. Based upon Strickland's request, Guiliano agreed to observe the calls.

85. On a call, Guiliano heard an investor ask Strickland and Egger, "When will the husband problem be solved?" Upon

information and belief, the "husband problem" referred to Guiliano's refusal to sign over all rights in cell-cultured milk from 108Labs to BIOMILQ.

86. Without access to 108Labs' proprietary technology, BIOMILQ would not be a viable business. Notwithstanding the lack of agreement about intellectual property, Egger and Strickland continued to pursue investor funding for BIOMILQ. Guiliano continued to maintain that he would only agree to allow BIOMILQ a field of use license of 108Labs' technology for the development of personalized infant formula.

87. While the conflict over the investor calls was ongoing, Guiliano continued his inventive contributions, spending time thinking through and ruling out alternative explanations for the presence of immunoglobulins in the bioreactor samples.

88. On March 22, 2020, Guiliano conceived a method for how sIgA could have been produced in the mammary cell bioreactor, after researching proteins from the proteins list. Guiliano's understanding of the tissue organization in the bioreactor allowed him to recognize how an engineered polarized lactating mammary cell monolayer might be ideal for recreating a biosynthetic pathway for sIgA similar to the natural production pathway of sIgA in a human body.

89. On March 23, 2020, Guiliano shared with Strickland his conception of a sIgA bioreactor using the mammary bioreactor with the inclusion of B cells. Strickland and Guiliano exchanged notes about Guiliano's concept. This 108Labs trade secret eventually would become part of the claimed invention of the '843 patent, the application for which was filed by BIOMILQ, and did not list Guiliano as a joint inventor.

90. On 25 March 2020, an investor emailed Strickland and Egger with a letter of intent, offering \$3,500,000 in payments to BIOMILQ upon execution of a contract. This email contained an acknowledgment that the rights in the invention of the cell-cultured milk belonged to 108Labs; the investor noted that an intellectual property right of first refusal would require an agreement between BIOMILQ and 108Labs, not BIOMILQ and new investors.

91. At this time, 108Labs began considering the formation of an additional affiliate company that would be focused upon sIgA and creating therapeutics. 108Labs would later form this affiliate, NeutraSiga Therapeutics, Inc. ("NeutraSiga"), in May 2020, with an official incorporation date of October 2021.

92. Between March 25, 2020 and March 29, 2020, Strickland sent Guiliano messages reassuring him that despite their conflict over how to manage 108Labs' intellectual property, she

loved him and that he was her partner and that she would never leave him.

93. Based upon the success of the FiberCell experiments and Guiliano's hypothesis about sIgA, Guiliano contacted 108Labs' patent counsel to schedule a meeting about pursuing additional patent application filings.

94. On March 29, 2020, Guiliano told Strickland he did not want Egger included in the discussions with 108Labs' patent counsel, because the intellectual property was 108Labs' and Egger was not part of 108Labs. Strickland responded that if Egger and BIOMILQ representation were not invited to the meeting, she would quit and would not attend the meeting either.

95. Notwithstanding her earlier assurances to Guiliano that their partnership was strong, on that same day, Strickland, via text message, resigned from 108Labs and maritally separated from Guiliano.

Strickland's Pursuit of 108Labs' Technology for BIOMILQ

96. The same day Strickland resigned from 108Labs and separated from Guiliano, Egger, by and through her separate company, Resilient Foods, LLC, submitted an application for trademark registration of the wordmark "BIOMILQ" at the USPTO.

97. In the days and weeks following Strickland's separation from Guiliano and resignation from 108Labs, Strickland and Egger relentlessly attempted to convince Guiliano

to agree to assign the '407 application to BIOMILQ and told him they would abandon the project if he did not do so.

98. It became clear at this time that rather than operate as an affiliate of 108Labs, Strickland and Egger wanted BIOMILQ to be a stand-alone entity, solely controlled by them without the participation of Guiliano.

99. On April 3, 2020, Guiliano received an email from BIOMILQ's counsel, attaching a letter from Strickland and Egger. In the letter, Strickland and Egger, "as officers of BIOMILQ Inc.[,]" informed Guiliano that they had received word from potential BIOMILQ investors that patent ownership was a requirement for their investment; to that end, they offered \$250,000 to purchase the patent held by 108Labs. The letter also attached an assignment agreement. The letter also stated that if BIOMILQ was not able to obtain the assignment agreement executed by Guiliano by April 6, 2020, it would terminate all working relationships with 108Labs, terminate all discussions with its prospective investors, and cease all scientific development on the project.

100. On April 4, 2020, Strickland sent a personal email to Guiliano asking him to collaborate with BIOMILQ and its investors rather than alienate them. In her email, Strickland said "[The investors] are fully aware of the history of 108Labs and your contribution to the invention, and they appreciate your

position and interests...." Strickland also texted Guiliano throughout the day, attempting to induce him to accept BIOMILQ's offer.

101. On April 6, 2020, Guiliano received an email from BIOMILQ's counsel reminding him that their offer to purchase the '407 application expired at 5 p.m. and noting that the purchase amount would decline to \$200,000 after 5 p.m., and ultimately would be reduced or eliminated entirely if the assignment was not completed.

102. Guiliano and 108Labs rejected BIOMILQ's offer to purchase the '407 application via an email to BIOMILQ's counsel on April 6, 2020. Also in that email, Guiliano clarified that 108Labs would no longer be willing to grant BIOMILQ the non-exclusive field of use license Strickland, Egger and Guiliano had discussed in December 2019. Guiliano further noted that BIOMILQ was required to cease all disclosures of any intellectual property or technology related to 108Labs' interests or otherwise operate in any way related to any of 108Labs' intellectual property.

103. On April 9, 2020, Guiliano and Strickland received an email from 108Labs' patent counsel reminding them to execute the formal assignment of the '407 application from them as individuals to 108Labs. Upon information and belief, Strickland

shared this confidential email with BIOMILQ's counsel and potential investors of BIOMILQ.

104. On April 10, 2020, Strickland assigned her rights in the '407 application to BIOMILQ, and this assignment was recorded in the U.S. Patent and Trademark Office. Upon information and belief, on this same day, BIOMILQ for the first time issued shares, with Strickland and Egger each receiving 50% of the shares. Guiliano, despite being a 5% owner in BIOMILQ, received no shares.

BIOMILQ's Misappropriation of 108Labs' Trade Secrets

105. By the time 108Labs' invention had been successfully reduced to practice in March 2020, Guiliano and Strickland, in their capacities as managing members for 108Labs, had spent seven years developing, creating, generating, investing in, and co-inventing the technology, knowledge, methods, trade secrets, discoveries, inventions and/or protocols underlying the technology that BIOMILQ would eventually incorporate in the Patents. 108Labs took active steps to protect its trade secrets including requiring execution of relevant nondisclosure agreements by individuals or companies outside of 108Labs, using secure facilities for the storage and testing of samples and products, restricting and tracking access to its samples and products, and requiring authorized users to maintain confidentiality.

106. Once it became clear that Guiliano would not agree to assign 108Labs' intellectual property to BIOMILQ, Strickland and BIOMILQ endeavored to move ahead with their business plans as if Guiliano and 108Labs had never existed.

107. At this time, BIOMILQ had accomplished no independent scientific discoveries or achievements. The discoveries and achievements it claimed to have made were in fact made by 108Labs.

108. BIOMILQ would not have been able to pursue the Patents but for its improper access to and use of 108Labs' proprietary technology and trade secrets. BIOMILQ would not have had access to 108Labs' proprietary technology and trade secrets but for Strickland's decision to breach her duties to 108Labs and divulge all 108Labs' intellectual property to BIOMILQ.

109. When Strickland resigned from 108Labs to join BIOMILQ, she knowingly and willingly took with her 108Labs' closely protected trade secrets, including but not limited to 108Labs' research and development plans, 108Labs' commercial development plans, and 108Labs' specialized protocols and scientific data regarding cell-cultured milk. Strickland took the physical records of 108Labs' institutional knowledge in the form of notebooks that memorialized 108Labs' seven years' worth of research and effort to produce cell-cultured milk. Upon information and belief, after she resigned from 108Labs,

Strickland also continued to access 108Labs' electronic records containing 108Labs' protected trade secrets.

110. Upon information and belief, throughout April and May of 2020, BIOMILQ began preparing a new provisional patent filing using 108Labs' secret protocols and scientific data.

111. BIOMILQ's misappropriation went to extreme levels when on or about May 21, 2020, Strickland stole 108Labs' lab samples and bioreactor from a secure laboratory and gave the samples and bioreactor to BIOMILQ. These were the same samples that had demonstrated that 108Labs' invention worked - that the '407 application had been reduced to practice and therefore had great potential for commercial viability.

112. In April 2020, Guiliano, as the sole remaining member of 108Labs, had realized sIgA was a big enough molecule to allow photography of it with an electron microscope to see the two IgA proteins connected to the "j-chain[.]" In early May 2020, Guiliano sent samples to the UC Davis electron microscopy lab. At this time, Guiliano was conducting an experiment to try to isolate the sIgA molecules from the rest of the milk. Upon information and belief, Strickland learned of this experiment from Dr. Barile; realizing that 108Labs was ahead of BIOMILQ in the development of sIgA synthesis, BIOMILQ was motivated to take the desperate step of stealing 108Labs' lab samples and bioreactor.

113. Strickland, without revealing she no longer was affiliated with 108Labs, contacted an employee of UNC Chapel Hill to request entry into a secure lab space where 108Labs' bioreactor and scientific samples containing the world's first cell-cultured milk was stored in a freezer. She entered a lab she had never possessed a key to, removed 108Labs' bioreactor and samples containing the world's first cell-cultured human milk, and gave them to BIOMILQ.

114. Guiliano was informed of this conversion of 108Labs' samples when an unsuspecting UNC Labs employee emailed to notify him that Strickland had taken the samples from the lab. Guiliano was irate over the theft and threatened to call the police. In a text exchange, Strickland admitted taking the samples and said she would return them. But Strickland did not return the samples.

115. After her resignation from 108Labs on March 29, 2020, Strickland had no right to access this secure lab space nor to take 108Labs' bioreactor and lab samples. BIOMILQ had no right at any point to use 108Labs' lab samples and/or bioreactor. BIOMILQ has never returned the lab samples or bioreactor to 108Labs.

116. Since May 21, 2020, 108Labs has been deprived of the opportunity to access its own bioreactor and to conduct further research on its own samples.

117. Only five days after BIOMILQ misappropriated 108Labs' samples and bioreactor, BIOMILQ filed a disclosure in a provisional application (Provisional Patent Application 63/030,149) that would be incorporated in the '843 patent, describing 108Labs' secret protocols and secret scientific data from those samples in detail. The disclosure claims included Guiliano's invention and discovery of novel sIgA synthesis in 108Labs' mammary cell bioreactor, which at that time was a trade secret of 108Labs.

***108Labs Attempts to Proceed with its
Groundbreaking Research***

118. Despite Strickland's resignation and the chaos involving BIOMILQ, 108Labs attempted to proceed with its groundbreaking research.

119. In May 2020, in addition to contracting with UC Davis to take direct images of isolated sIgA molecules, as noted above, 108Labs also received an investment offer from SSC Ventures to support its research into the therapeutic aspects of cell-cultured milk.

120. On or about May 25, 2020, 108Labs founded NeutraSiga as a 108Labs subsidiary to advance research into therapeutic applications of 108Labs' milk and sIgA invention and discoveries.

121. Upon information and belief, after learning of its intent to invest in 108Labs, BIOMILQ contacted SSC Ventures and falsely claimed that 108Labs had stolen the milk project from BIOMILQ.

122. 108Labs and NeutraSiga sought collaboration with scientific partners, such as Dr. Barile and Dr. Rebecca Powell, a researcher at Mt. Sinai University. But, BIOMILQ interfered with these scientific collaborations by contacting both Dr. Barile and Dr. Powell and alleging that Guiliano was making misleading comments about his and 108Labs' role in creating cell-cultured milk. This interference by BIOMILQ led to both of these scientists ending their collaborations with 108Labs.

The Patents and Assignments

123. On January 8, 2020, attorneys representing 108Labs filed with the U.S. Patent and Trademark Office ("USPTO") a provisional patent application that the USPTO designated as Provisional Application No. 62/958,407 (the '407 application). The '407 application listed Guiliano and Strickland as inventors. The '407 application is entitled "Live Cell Constructs for Production of Cultured Milk and Methods of Using the Same." The specification, claims, abstract, and figures of the '407 application are attached hereto as Exhibit C. The filing receipt for the '407 application issued by the USPTO

indicates that the inventors are Guiliano and Strickland. The filing receipt is attached hereto as Exhibit D.

124. An applicant, such as an inventor, assignee, obligated assignee of an invention, or an entity with sufficient proprietary rights, may file a provisional patent application without all the formal requirements of a nonprovisional patent application. A provisional application provides the means to establish an early effective filing date in a later filed nonprovisional patent application and permits the term "Patent Pending" to be used in connection with the invention. A provisional application alone does not mature into an issued patent.

125. On April 10, 2020, only twelve days after resigning as Manager/Member of 108Labs, Strickland assigned her own rights in the '407 application to BIOMILQ, and the assignment was recorded at the USPTO that day.

126. Guiliano was not aware of Strickland's assignment, and Strickland did not inform Guiliano that she had assigned her rights in the '407 application until on or about May 5, 2020.

127. On May 26, 2020, BIOMILQ filed with the USPTO via its attorneys a provisional patent application that the USPTO designated as Provisional Application No. 63/030,149 (the '149 application), entitled "Milk Product Compositions." Strickland

was listed as the sole inventor. On March 24, 2021, Strickland assigned her own rights in the '149 application to BIOMILQ.

128. On December 10, 2020, BIOMILQ's legal counsel emailed Guiliano requesting that he assign any rights he may have in the '407 application to BIOMILQ. This email is an admission from BIOMILQ that Guiliano has an inventorship interest in the inventions it was seeking to patent. Guiliano refused to assign his rights.

129. On that same day, BIOMILQ filed with the USPTO via its attorneys a provisional patent application that the USPTO designated as Provisional Application No. 63/199,164 (the '164 application), entitled "Live Cell Constructs for Production of Cultured Milk and Methods of Using the Same," the same title as the '407 application. Strickland erroneously was listed as the sole inventor.

130. On December 18, 2020, BIOMILQ filed a nonprovisional patent application that the USPTO designated as U.S. Patent Application 17/247,672 ("the '672 application"). The '672 application claimed priority to both the provisional '407 and '164 applications.

131. On January 5, 2021, Strickland executed a "Confirmatory Assignment" purporting to assign not just her own rights but the entire right, title, and interest in the '672 application, all inventions therein, all patent applications

claiming priority thereto, and any patents issuing from the foregoing, to BIOMILQ.

132. The '672 application was examined and the USPTO issued from that application the '477 patent on September 7, 2021. The '477 patent, entitled "Live Cell Constructs for Production of Cultured Milk and Methods of Using the Same," has the same title as the '407 application. The '672 application and the resulting '477 patent incorporate all of the figures and much, if not substantially all, of the text of the specification, with some editing and rearranging, of the '407 application on which Guiliano is listed as an inventor; however, Strickland erroneously is the sole inventor listed on the '477 patent. BIOMILQ is listed on the face of the patent as the applicant and assignee.

133. Claim 1 is representative of the '477 patent and is directed to producing an isolated milk product from cultured mammary cells, as conceived by Guiliano. Claim 1 reads:

A method of producing an isolated milk product from cultured mammary cells, the method comprising:

(a) culturing a live cell construct in a bioreactor under conditions which produce the milk product, said live cell construct comprising:

(i) a three-dimensional scaffold having an exterior surface, an interior surface defining an interior cavity, and a plurality of pores extending from the interior surface to the exterior surface;

(ii) a matrix material disposed on the exterior surface of the three-dimensional scaffold;

(iii) a culture medium disposed within the interior cavity and in fluidic contact with the internal surface; and

(iv) a confluent monolayer of polarized mammary cells disposed on the matrix material, wherein the mammary cells are selected from the group consisting of: live primary mammary epithelial cells, live mammary myoepithelial cells, live immortalized mammary epithelial cells, and live immortalized mammary myoepithelial cells, and wherein the polarized mammary cells comprise an apical surface from which the cultured milk product is secreted and a basal surface; said bioreactor comprising an apical compartment that is in fluidic contact with the apical surface of the mammary cells, is substantially isolated from the interior cavity of the live cell construct, and is substantially free of cell culture medium; and

(b) isolating the cultured milk product secreted into the apical compartment from the apical surface of the mammary cells.

134. On March 9, 2021, BIOMILQ filed with the USPTO via its attorneys a provisional patent application that the USPTO designated as Provisional Application No. 63/200,480 (the '480 application), entitled "Cultured Milk Product Compositions." Strickland was listed as the sole inventor. On March 24, 2021, Strickland assigned her own rights in the '480 application to BIOMILQ.

135. On March 29, 2021, one year to the day after Strickland resigned from 108Labs as Manager/Member, BIOMILQ

filed a nonprovisional patent application that the USPTO designated as U.S. Patent Application 17/301,216 ("the '216 application"). The '216 application claimed priority to both the provisional '149 and '480 applications.

136. On April 15, 2021, Strickland executed a "Confirmatory Assignment" purporting to assign not just her own rights but the entire right, title, and interest in the '672 application, all inventions therein, all patent applications claiming priority thereto, and any patents issuing from the foregoing, to BIOMILQ.

137. The '216 application was examined and the USPTO issued from that application the '843 patent, entitled "Milk Product Compositions," on December 28, 2021. The '216 application and the resulting '843 patent incorporate all of the figures and some of the text of the specification of the '407 application on which Guiliano is listed as an inventor; however, Strickland erroneously is the sole inventor listed on the '843 patent. BIOMILQ is listed on the face of the patent as the applicant and assignee.

138. Claims 1, 12, and 13 are representative of the '843 patent. Claim 1 is directed to producing an isolated milk product comprising secretory IgA (sIgA) from cultured mammary cells and plasma cells. Claim 1 reads:

A method of producing an isolated milk product comprising secretory IgA (sIgA) from cultured mammary cells and plasma cells, the method comprising:

a. culturing a live cell construct in a bioreactor under conditions which produce the milk product, said cell construct comprising:

i. a three-dimensional scaffold having an exterior surface, an interior surface defining an interior cavity, and a plurality of pores extending from the interior surface to the exterior surface;

ii. a matrix material disposed on the exterior surface of the three-dimensional scaffold;

iii. a culture medium disposed within the interior cavity and in fluidic contact with the interior surface;

iv. a plurality of live plasma cells disposed on the matrix material; and

v. a confluent monolayer of polarized mammary cells disposed on the plurality of plasma cells, wherein the mammary cells are selected from the group consisting of: live mammary epithelial cells, and live mammary myoepithelial cells, wherein the polarized mammary cells comprise an apical surface from which the milk product is secreted and a basal surface; said bioreactor comprising an apical compartment that is in fluidic contact with the apical surface of the live mammary cells, is substantially isolated from the interior cavity of the live cell construct, and is substantially free of cell culture medium; and

b. isolating the milk product secreted into the apical compartment from the apical surface of the live mammary cells and the plasma cells.

139. Claim 12 recites: "The cell construct of claim 8, wherein the mammary cells comprise a constitutively active

prolactin receptor protein." Claim 13 recites: "The cell construct of claim 8, wherein the culture medium comprises prolactin."

140. During examination of the '216 application that issued as the '843 patent, the USPTO examiner rejected its claims on the basis of "nonstatutory double patenting," specifically in reference to the '477 patent in view of another patent, which incorporates the '407 application by reference in its entirety. The USPTO examiner stated in a rejection of the '216 application, "Although the claims at issue are not identical, they are not patentably distinct from each other because the claims of the '477 patent disclose the method of producing milk using mammary cells cultured in a 3D scaffold forming polarized mammary cells with the same configuration as claimed in the instant application." The USPTO examiner's double patenting rejection was overcome with a "terminal disclaimer" which was only permitted because of the common ownership of purported-assignee BIOMILQ, and the '843 patent was passed to issuance.

141. The '407 and '164 applications are incorporated by reference in their entireties into the '477 patent; the '149 and '480 applications are incorporated by reference in their entireties into the '843 patent.

142. The Patents report additional experiments that were conducted by Guiliano and Strickland or with their research

partners under their direction. These experiments depended on and grew out of Guiliano's input in the persistent and long-term collaboration with Strickland, in which they privately worked together and under nondisclosure agreements with research partners to conceive and reduce to practice the inventions of 108Labs disclosed and claimed in the '477 and '843 patents.

143. Guiliano made substantial contributions throughout the inventive process to both conception and reduction to practice for both of the Patents. This included but was not limited to Guiliano's conception of the entire idea of pursuing producing milk using cultured mammary cells; Guiliano's analysis of scientific data and scientific direction of research partners; Guiliano's conception and work in reducing to practice the basement membrane formulation, i.e., matrix material; Guiliano's recognition of the importance of sIgA, which is created with B cells; his recognition of the importance of prolactin escalation and cycling; Guiliano's intense scientific collaboration over the course of 2013 to 2020; and in Guiliano's contribution to the reduction to practice of the inventions.

144. In their collaboration over the course of nearly seven years, Guiliano did more than merely provide Strickland with well-known principles or explain the state of the art.

145. In his collaborative research with Strickland, Guiliano contributed his ideas to the total inventive concept

that is claimed in the Patents, and such contributions were significant in quality when measured against the dimension of the full inventions.

146. Guiliano conceived and made significant contributions to important aspects and features of the inventions claimed in the Patents and to the reduction to practice of the inventions. With specific reference to the express wording of the claims, Guiliano conceived the claim elements of the Patents including, but not limited to, the concept of producing an isolated milk product from cultured mammary cells (claim 1 of the '477 patent) with the addition of plasma cells (claim 1 of the '843 patent); the matrix material (claim 1 of the '477 patent and claims 1 and 8 of the '843 patent); the stated presence of sIgA in the milk product (claim 1 of the '843 patent); and prolactin receptor protein and prolactin (claims 12 and 13 of the '843 patent), as well as the reduction to practice of these elements and all the elements of the claimed invention, in addition to other contributions set forth herein.

147. Guiliano is a joint inventor of each of the Patents.

Strickland Agrees Guiliano is a Joint Inventor

148. Prior to resigning from 108Labs, Strickland recognized Guiliano's role as a joint inventor.

149. On January 7, 2020, 108Labs' patent counsel asked Strickland who should be listed as the inventor on the '407

application and supplied the detailed criteria for what makes a person eligible to be designated as an inventor on a patent application to Strickland for her review. Patent counsel wrote, "Per our discussion a couple of weeks ago, did you consider who should be named as inventors in view of the claims as they stand now? ... As we discussed, inventorship is based on conception of the invention (not simply carrying out experiments under the orders of someone else or providing materials). As we also discussed, naming the correct inventors is important for validity and also avoids any unexpected challenges down the road. I look forward to receiving this inventorship information." In response, Strickland stated she and Guiliano were the inventors of the inventions to be disclosed in the '407 application.

150. On February 11, 2020, Strickland sent an email regarding 108Labs' findings to Dr. Barile in which she states, "I will be in the lab with my joint inventor, Shayne Guiliano, and we'd love to chat."

151. On February 25, 2020, in an email exchanged between Egger, Strickland and Guiliano, Egger summarized the terms the group was considering in establishing BIOMILQ. One of the terms was that "Shayne is a Co-Inventor... ." Strickland responded to this email the next day, "Agree!"

152. Even after she separated from Guiliano and left 108Labs, Strickland admitted Guiliano's role as an inventor and 108Labs' interest in the inventions.

153. On May 14, 2020, Strickland emailed a third-party vendor stating, "[Guiliano] and I originally started 108Labs together in 2013 While I'm now focused on [BIOMILQ] and working on nutritional products for babies, [Guiliano] is moving ahead with some interesting therapeutic applications of the same foundational technology... ."

154. In a June 10, 2020 text exchange with Guiliano, Strickland acknowledged that Guiliano was an inventor and co-owner of the inventions in which BIOMILQ publicly claims he had no involvement.

155. A week later, on June 17, 2020, during a recorded phone conversation Strickland admitted it was wrong that BIOMILQ had been taking credit for 108Labs' inventions and acknowledged that Guiliano was an inventor of the patented technology. During the conversation, Strickland told Guiliano she had discussed with Egger that BIOMILQ's public statements would become a problem because BIOMILQ did not have an agreement in place with 108Labs and Guiliano had his own interest in the technology. Strickland further noted that BIOMILQ was vulnerable because it did not have the right to do all it had done.

Strickland Breached her Fiduciary Duty to 108Labs and Guiliano

156. Guiliano and Strickland founded and were the sole members of 108Labs from its inception on October 1, 2013, until Strickland's resignation on March 29, 2020.

157. Guiliano and Strickland, the member-managers of 108 Labs, invented the intellectual property that was misappropriated by BIOMILQ in order to file the Patents.

158. As a manager of the LLC, Strickland had a fiduciary duty to 108Labs. Strickland, at least until she separated from Guiliano, also had a spousal fiduciary duty to Guiliano individually.

159. Strickland assigned the '407 application to BIOMILQ on April 10, 2020, only twelve days after resigning her position as Manager at 108Labs. Strickland knowingly failed to assign her rights in the '407 application before her resignation. Once Strickland assigned her rights in the '407 application, BIOMILQ received \$3,500,000 in funding.

160. As manager of an LLC, Strickland owed 108Labs the manager's duty of loyalty and care, which includes an obligation not to divert a corporate business opportunity for her own personal gain. Yet, Strickland did exactly this, proximately causing injury to 108Labs, including but not limited to loss of patent rights and loss of associated revenue from exercising those patent rights.

161. In addition to her fiduciary obligations to 108Labs as an LLC manager, Strickland also owed marital duties to Guiliano. The marital relationship is the most confidential of relationships. Spouses owe to one another a mutual obligation to manage, control and preserve their community assets with the utmost care and loyalty. Strickland breached her marital obligations in her dealings with BIOMILQ including but not limited to when she disclosed 108Labs' confidential information to BIOMILQ, when she chose to act for the benefit of BIOMILQ to the detriment of 108Labs, and when she failed to communicate to Guiliano her plans to do so.

162. Further, 108Labs had the ability, financial and otherwise, to take advantage of the opportunity that Strickland usurped for BIOMILQ. In fact, 108Labs had engaged in prior negotiations for the opportunity.

163. Strickland was aware of 108Labs' opportunities by virtue of her fiduciary position.

164. 108Labs' facilities were used to conduct the research to acquire these opportunities.

165. With each of these actions, Strickland breached her fiduciary duty by usurping 108Labs' corporate opportunities before her resignation as a Manager.

166. The conception and reduction to practice of the inventions claimed in the Patents occurred while Strickland was

a Manager of 108Labs. Strickland knowingly misappropriated 108Labs' trade secrets and proprietary technology that is presented as BIOMILQ's in the Patents.

167. Accordingly, Strickland owed 108Labs a fiduciary duty; Strickland breached that fiduciary duty by not assigning the '407 application to 108Labs before she resigned as Manager/Member and left to officially join BIOMILQ and by divulging 108Labs' trade secrets to BIOMILQ; and this breach of fiduciary duty was a proximate cause of injury to 108Labs.

168. In addition, as Guiliano's wife, Strickland breached her spousal fiduciary duty to Guiliano individually by her actions taken prior to separating from him.

Strickland is Liable for Constructive Fraud

169. Strickland's breach of fiduciary duty constituted constructive fraud because she owed 108Labs a fiduciary duty, breached her fiduciary duty, and sought to benefit herself in the transaction. In addition, the circumstances of Strickland's marriage to Guiliano and their nearly seven-year collaboration created a relation of trust and confidence in Guiliano, and led up to and surrounded the consummation of the trade secret

misappropriation in which Strickland took advantage of her position of trust to the detriment of 108Labs.

170. Prior to March 29, 2020, Strickland consistently held out that the '407 application was the intellectual property of 108Labs.

171. Strickland had a fiduciary relationship with 108Labs and Guiliano. 108Labs and Guiliano are entitled to a constructive trust over any benefit that she derived from the development of the inventions disclosed and claimed in the '407, '164, '672, '149, '480, and '216 patent applications ("the Applications"), the '477 and '843 patents, and any other related U.S. or foreign patents and applications.

Equitable Title to the Patents Lies in 108Labs

172. As an alternative to the imposition of a constructive trust, equitable title to the Patents, Applications, and related U.S. and foreign applications lies in 108Labs.

173. This equitable title is the result of (a) Strickland's breach of fiduciary duty and constructive fraud, but for which 108Labs would have been assigned her rights in the '407 application in advance of her resignation from 108Labs, and (b) misappropriation of trade secrets, but for which Strickland and BIOMILQ would not have been able to acquire the Patents, or even have had the information to be able to file other patent applications and related U.S. and foreign applications.

BIOMILQ's Financial Windfall from its Improper Use of 108Labs' Proprietary Technology

174. BIOMILQ improperly gained significant economic benefit from claiming the exclusive commercial right to 108Labs' invention of cell-cultured milk.

175. In failing to list Guiliano as a joint inventor, BIOMILQ, as assignee from Strickland, gained exclusive rights of ownership to the '477 patent and the '843 patent that it otherwise would not and should not have had.

176. BIOMILQ received initial funding of \$3.5 million in June 2020 after Strickland assigned 108Labs' intellectual property to BIOMILQ. With these funds, BIOMILQ opened a lab and hired additional researchers.

177. Approximately one week after the '477 patent was issued, in October 2021, BIOMILQ received \$21,000,000 in additional funding from investors.

178. After filing the applications for the Patents, BIOMILQ took active steps to exclude 108Labs from using 108Labs' proprietary technology and to erode Guiliano's and 108Labs' ability to pursue research and receive investor support. On at least two occasions, BIOMILQ contacted 108Labs' scientific partners, interfering with and compromising its scientific collaborations.

179. On information and belief, since 2021, BIOMILQ has continued to seek funding from investors and otherwise continued to benefit from the Patents to which it does not properly have legal title and the intellectual property it misappropriated from 108Labs.

Count I

***(Correction of Inventorship of United States
Patent No. 11,111,477)***

180. Guiliano and 108Labs repeat and reallege the allegations set forth in the paragraphs of the Complaint above as if those allegations have been set forth herein.

181. Guiliano made significant contributions to the conception and reduction to practice of the subject matter claimed in the '477 patent.

182. Guiliano is a joint inventor of the '477 patent.

Count II

***(Correction of Inventorship of United States
Patent No. 11,206,843)***

183. Guiliano and 108Labs repeat and reallege the allegations set forth in the paragraphs of the Complaint above as if those allegations have been set forth herein.

184. Guiliano made significant contributions to the conception and reduction to practice of the subject matter claimed in the '843 patent.

185. Guiliano is a joint inventor of the '843 patent.

Count III

(Trade Secret Misappropriation - North Carolina Trade Secret Protection Act)

186. Guiliano and 108Labs repeat and reallege the allegations set forth in the paragraphs of the Complaint above as if those allegations have been set forth herein.

187. Strickland was co-founder of 108Labs. From October 1, 2013 until at least March 29, 2020, she was a member and manager of 108Labs.

188. Since its inception, 108Labs has developed trade secrets, confidential information and intellectual property. 108Labs has invested considerable time and capital in developing these trade secrets, confidential information and intellectual property. These trade secrets, confidential information and intellectual property have at all times constituted a significant contribution to the value of 108Labs.

189. 108Labs was the exclusive owner of its proprietary technology, recorded data from its experiments, notebooks, cell samples and cell bioreactor, and at no time transferred any ownership rights in its trade secret information, recorded data, notebooks, lab samples or bioreactor to BIOMILQ.

190. 108Labs has never provided express or implied authority to Strickland or BIOMILQ to acquire, disclose to third parties, or use 108Labs' trade secrets.

191. 108Labs has made reasonable efforts under the circumstances to maintain the secrecy of its trade secrets, including but not limited to, requiring execution of relevant nondisclosure agreements and using secure facilities for the storage and testing of its samples and products.

192. Because of her role with 108Labs, Strickland was well-aware of 108Labs' and Guiliano's express desire to protect 108Labs' trade secrets, confidential information and intellectual property.

193. 108Labs' trade secrets derived actual and potential economic value from not being generally known to and not being readily ascertainable through proper means by another person who can obtain economic value from the disclosure or use of the trade secrets.

194. Strickland improperly disclosed all 108Labs' proprietary information to BIOMILQ. BIOMILQ then improperly utilized 108Labs' proprietary information as if it were its own.

195. BIOMILQ willfully and maliciously misappropriated 108Labs' lab samples, when Strickland falsely posed as a principal of 108Labs to enter 108Labs' secure research facility to remove 108Labs' cell samples.

196. BIOMILQ knew or should have known that it had acquired 108Labs' trade secrets, recorded data, notebooks, cell samples and bioreactor through improper means.

197. Evidence of the value of 108Labs' trade secrets is demonstrated by the successful funding and issuance of patents BIOMILQ has derived from its misappropriation of 108Labs' trade secrets.

198. As a direct and proximate result of BIOMILQ's conduct, Guiliano and 108Labs have suffered harm. Because of BIOMILQ's willful and malicious misappropriation and disclosure of 108Labs' trade secrets, Guiliano and 108Labs have suffered significant economic hardship and BIOMILQ has received an unfair monopoly over cell-cultured milk and the financial windfall that comes with it.

Count IV

(Conversion)

199. Guiliano and 108Labs repeat and reallege the allegations set forth in the paragraphs of the Complaint above as if those allegations have been set forth herein.

200. 108Labs was the exclusive owner of its recorded data from its experiments, notebooks, cell samples and cell bioreactor, and at no time transferred any ownership rights in its property to BIOMILQ.

201. On May 21, 2020, after she had resigned from 108Labs, Strickland wrongfully entered 108Labs' secure storage facility and stole 108Labs' lab samples and bioreactor. She then gave the lab samples and bioreactor to BIOMILQ. These lab samples were the very same samples that had demonstrated that 108Labs' invention worked - that the '407 application had been reduced to practice and therefore had great potential for commercial viability.

202. Guiliano asked for the samples and bioreactor to be returned, but neither Strickland nor any other representative from BIOMILQ has returned the samples or bioreactor.

203. Neither Strickland nor any other representative from BIOMILQ has returned 108Labs' recorded data or notebooks.

204. BIOMILQ unlawfully converted 108Labs' property, including recorded data, notebooks, lab samples and bioreactor, and this unlawful conversion has harmed Guiliano and 108Labs and caused significant damages.

Count V

(Constructive fraud)

205. Guiliano and 108Labs repeat and reallege the allegations set forth in the paragraphs of the Complaint above as if those allegations have been set forth herein.

206. Strickland was a co-founder, manager and officer of 108Labs, and she owed fiduciary duties of loyalty and

confidentiality and care to 108Labs. Strickland was Guiliano's spouse, to whom she owed a spousal fiduciary duty until she separated from Guiliano.

207. Strickland breached her fiduciary duties by disclosing 108Labs' confidential information, trade secrets, and tangible property to BIOMILQ for the benefit of BIOMILQ and to the detriment of 108Labs.

208. Strickland breached her fiduciary duties by usurping business opportunities that would have been available and/or offered to 108Labs, but instead were pursued for the benefit of BIOMILQ.

209. Strickland took these actions with the clear intent of benefiting and enriching BIOMILQ and herself to the detriment of 108Labs and Guiliano.

Count VI

(Constructive Trust)

210. Guiliano and 108Labs repeat and reallege the allegations set forth in the paragraphs of the Complaint above as if those allegations have been set forth herein.

211. Strickland was a manager of 108Labs, an LLC to which she owed a fiduciary duty. Strickland was Guiliano's spouse, to whom she owed a spousal fiduciary duty until she separated from Guiliano.

212. Strickland and Guiliano toiled for years at 108Labs to invent cell cultured milk. Once they achieved this goal and applied to patent this science, Strickland, instead of protecting 108Labs' proprietary technology and related trade secrets, knowingly, willfully and wrongfully turned them over to BIOMILQ.

213. BIOMILQ was only able to obtain the Patents because of Strickland's improper assignment to BIOMILQ.

214. BIOMILQ knew Strickland's assignment was not valid, yet did not take steps to correct the assignment and instead sought patents and other investments based upon this improper assignment.

215. Further, BIOMILQ would not have been able to pursue the Patents but for its misappropriation of 108Labs' trade secrets and intellectual property.

216. Under North Carolina law, a constructive trust arises when one obtains legal title to property in violation of a duty owed to another, typically involving actual or presumptive fraud or the breach of a confidential relationship. *Patterson v. Strickland*, 133 N.C. App. 510, 515 S.E.2d 915 (1999).

217. A constructive trust can be imposed to prevent the unjust enrichment of the holder of the legal title to property acquired through a breach of duty or other inequitable circumstance.

218. In the alternative, for the same reasons, based on the equitable title held by 108Labs, BIOMILQ should be required to assign its patents and applications to 108Labs.

Count VII

(Unfair and Deceptive Trade Practices)

219. Guiliano and 108Labs repeat and reallege the allegations set forth in the paragraphs of the Complaint above as if those allegations have been set forth herein.

220. Strickland and BIOMILQ committed unfair and deceptive trade practices and acts against 108Labs in order to gain a global monopoly in cell-cultured milk.

221. These acts include but are not limited to the following:

- a. Strickland and BIOMILQ have wrongfully taken credit for the work, ownership and discoveries of 108Labs and taken affirmative steps to discredit 108Labs' valid claims to its inventions;
- b. Strickland and BIOMILQ have usurped business opportunities from 108Labs for the benefit of BIOMILQ that would have been available to and/or offered directly to 108Labs, or from which 108Labs would have benefited; and
- c. Strickland and BIOMILQ have taken active steps to discredit Guiliano and 108Labs' reputation within

the scientific community, so as to protect its wrongfully acquired monopoly in the cell-cultured milk market.

222. These acts were committed with the purpose of depriving 108Labs of its proprietary technology.

223. The actions taken by Strickland and BIOMILQ were in or affecting commerce, because the acts involved proprietary technology, trade secrets, Patents, and contracts which were in furtherance of the eventual sale of a commercial product to consumers.

224. As a direct and proximate results of BIOMILQ's unfair and deceptive trade practices, 108Labs has suffered actual damages in an amount to be determined at trial.

Count VIII

(Declaratory Judgment under 28 U.S.C. § 2201)

225. Guiliano and 108Labs repeat and reallege the allegations set forth in the paragraphs of the Complaint above as if those allegations have been set forth herein.

226. BIOMILQ was formed by Guiliano, Strickland and Egger for the purpose of commercializing the technology developed by 108Labs.

227. Guiliano entered into an agreement with Strickland and Egger and BIOMILQ that Guiliano would have a 5% ownership interest in BIOMILQ.

228. BIOMILQ agreed that Guiliano would be a co-owner of BIOMILQ.

229. Upon information and belief, the board of BIOMILQ was aware of this agreement, and yet in April of 2020, when stock was issued, deliberately failed to issue 5% to Guiliano.

230. Egger led Guiliano to believe that, even if his 5% share would not be issued immediately, the company was obligated to issue that interest.

231. Accordingly, Guiliano is entitled to a declaration that he is a 5% owner in BIOMILQ.

Demand for Jury Trial

232. Pursuant to F.R. Civ. P. 38, Guiliano and 108Labs hereby demand a trial by jury for all claims properly triable thereby.

Requests for Relief

WHEREFORE, Shayne Guiliano and 108Labs, LLC respectfully request that this Court:

- i. Enter judgment in favor of Guiliano and 108Labs on all claims against Strickland and BIOMILQ alleged in this Amended Complaint;
- ii. Award Guiliano and 108 Labs compensatory damages;

- iii. Impose a constructive trust over the Patents and any related patents and pending patent applications, both U.S. and foreign, as well as international applications pending under the Patent Cooperation Treaty from BIOMILQ to 108Labs, or in the alternative, require assignment of same by BIOMILQ to 108Labs based on the equitable title held by 108Labs;
- iv. Impose a constructive trust over all benefits received or conferred on BIOMILQ and Strickland based on the claim that Strickland was the sole inventor of subject matter in the '477 Patent and the '843 Patent;
- v. Determine and declare that Guiliano is a joint inventor of the Patents;
- vi. Order the United States Patent and Trademark Office to correct inventorship of the Patents by adding Guiliano as a joint inventor;
- vii. Determine that this is an exceptional case under 35 U.S.C. § 285 and award Guiliano and 108Labs their reasonable attorneys' fees and costs;
- viii. Order BIOMILQ and Strickland to return all of 108Labs' tangible property in their possession, including but not limited to, lab notebooks, lab

samples, lab equipment, and recorded data related to
108Labs' technology;

- ix. Award Guiliano and 108Labs treble damages for
BIOMILQ's trade secret misappropriation;
- x. Award Guiliano and 108Labs treble damages for
Strickland's and BIOMILQ's unfair and deceptive
trade practices;
- xi. Enter a declaratory judgment that Guiliano is an
owner of BIOMILQ;
- xii. Grant Guiliano and 108Labs such other and further
relief that this Court deems just and proper.

Dated: November 22, 2024

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